National Park Service
U.S. Department of the Interior

Federal Lands Transportation Program www.nps.gov/transportation



Carlsbad Caverns National Park — Rehabilitation Project

The Bat Cave Draw and Visitor Center rehabilitation project, managed by the Denver Service Center (DSC), was a unique project affecting 1.75 acres that required years of collaboration and planning to develop. Carlsbad Caverns (CAVE) has been an important tourist site since the 1930s; early on, large parking facilities were developed around the cavern. A 1997 Infiltration Study determined that the primary parking lot, built directly above the main cavern approximately 80 years before, was adversely impacting the cave system.

"Studies found that antifreeze, gas, and other pollutants were actually leaching down into the cave," explains Jessica Brown, a landscape architect and horticulturist with the National Park Service in Denver, Colorado.

"The National Park Service never would have done such a thing in later years, once a critical scientific approach was adopted into the management of resources such as the delicate Cavern environment," said John Benjamin, Superintendent of Carlsbad Caverns National Park. "However, in those early days the only goal was to get tourists to see these spectacular underground wonders in the quickest and easiest way possible."

The Rehabilitation Begins

An Environmental Assessment of the Reconstruction of Visitor Center Parking Areas and Rehabilitation of Walnut Canyon Road, completed in 2007, determined that removing the parking facility above the cave system and rehabili-

tating the area to its natural state using vegetation native to the region was the preferred solution. In 2010 construction began to remove the parking area and relocate it closer to the visitor center, and farther from the mouth of the cavern. A relatively level concrete walkway now provides easy access to the Bat Flight Amphitheater and the entrance to Carlsbad Cavern.

The old parking lot asphalt was ripped out, and the site was rehabilitated with topsoil local to the region. One of the most intensive aspects of the project was replanting the site using Carlsbad Caverns National Park genetic plant material which was collected, salvaged, stored, and propagated over the course of three years prior to project implementation. The historic walls in the old parking area, constructed by the Civil Conservation Corps remain as reminders of the sites previous use. However, instead of being surrounded by vehicles, the walls are now surrounded by Chihuahuan Desert Plants.

THE SUSTAINABLE SITES INITIATIVE (SITES™)

The Sustainable Sites Initiative (SITES™) is an interdisciplinary effort by the American Society of Landscape Architects, the Lady Bird Johnson Wildflower Center at The University of Texas at Austin, and the United States Botanic Garden to create voluntary national guidelines and performance benchmarks for sustainable land design, construction and maintenance practices. After more than a decade of planning efforts, in 2010, SITES™ sent out a call for pilot projects to test its new sustainable rating system for landscapes.

The National Park Service's Re-Vegetation Program is supported in full by the Federal Lands
Transportation Program

The Carlsbad project was submitted to SITES™ and was accepted. Nearly three years later and after countless hours of documentation, the Carlsbad Caverns Rehabilitation project is expecting two stars out of four in the SITES™ rating system in 2013. This is similar to a Silver certification in the Leadership in Energy and Environmental Design (LEED) rating system.

"The immense resource protection value of this long soughtafter and planned-for project needs the recognition of the SITESTM program to help encourage other managers, both inside the National Park Service and at other Federal, state and private entities with land management responsibilities, to take on the challenging and difficult yet vital projects that are needed to protect fragile, irreplaceable resources," said Superintendent Benjamin. "The recognition provided by the SITESTM rating is important because now there's a value associated with the extensive efforts made by the project team."

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The photos above show the parking area at Carlsbad Caverns N.P. before and after the revegetation project, started in 2010.